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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/494,877	01/31/2000	Zhigang Fang	34098/GTL/S61	4072
59826 7590 05/14/2008 SMITH INTERNATIONAL PATENT APPLICATIONS JEFFER, MANGELS, BUTLER & MARMARO LLP 1900 AVENUE OF THE STARS SEVENTH FLOOR LOS ANGELES, CA 90067			EXAMINER MCGUTHRY BANKS, TINA MICHELE	
			ART UNIT 1793	PAPER NUMBER
			MAIL DATE 05/14/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/494,877

Applicant(s)

FANG ET AL.

Examiner

TIMA M. MCGUTHRY-BANKS

Art Unit

1793

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 7, 11-14, 19-21, 25-27, 29, 33, 34, 37 and 41-44 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

- 5) ☐ Claim(s) _____ is/are allowed.

- 6) ☒ Claim(s) 1, 7, 11-14, 19-21, 25-27, 29, 33, 34, 37 and 41-44 is/are rejected.

- 7) ☐ Claim(s) _____ is/are objected to.

- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Status of Claims

Claims 1, 7, 14, 33, 37, 41, 42 and 44 are as previously presented, Claims 2-6, 8-10, 15-18, 22-24, 28, 30-32, 35, 36, 38-40, and 45-47 are cancelled, Claims 11-13, 20, 21, 26, 27, and 34 are as originally filed, and Claims 19, 25, 29, and 43 are as currently amended.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 7, 11, 12, 14 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 1,450,654 in view of EP 0 085 125.

GB '654 in view of EP '125 is applied as discussed in the office action mailed 1 October 2007.

Claims 13, 33, 34, 37, 41 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB '654 in view of EP '125 as applied to claim 1 above, and further in view of GB 2,273,301 or Liang et al (US 6,197,084) or Fang et al (US 5,880,382).

GB '654 in view of EP '125 and further in view of GB '301, Liang et al or Fang et al is applied as discussed in the office action mailed 1 October 2007.

Claims 25-27 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB '654 in view of EP '125 and Fang et al.

GB '654 in view of EP '125 and Fang et al is applied as discussed in the office action mailed 1 October 2007.

Claims 43 and 44 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Fang et al in view of EP '125 and Hale (US 3,816,081).

Fang et al in view of EP '125 and Hale is applied as discussed in the office action of 1 October 2007.

Response to Arguments

The following rejections have been withdrawn:

- Claims 25-27, 32, 33, 37, 41 and 43 under 35 U.S.C. 103(a) over Fang et al
- Claims 25-27, and 32 under 35 U.S.C. 103(a) over EP '125
- Claims 1, 7, 11, 12, 14, 19-21, 25-27, 29, and 32 under 35 U.S.C. 103(a) over EP '125 in view of Hale
- Claims 1, 7, 11-14, 19-21, 25-27, 33, 34, 37, and 42 under 35 U.S.C. 103(a) over EP '125 in view of EP '301 and Hale
- Claims 1, 7, 11-14, 19-21, 25-27, 29, 32-34, 37, 41 and 42 over Fang et al in view of EP '125 and Hale

With respect to item II, applicant submits that the most that one skilled in the art would be motivated to do would be to add Mn to the composition of GB '654. The examiner agrees that this addition would not increase the binder alloy composition. According to MPEP § 2144.05 I:

Similarly, a *prima facie* case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties.

Coefficient of thermal expansion is based on composition; therefore, if the claimed composition is taught by the reference, then it is inherent that it would have the same coefficient of thermal expansion. Because applicant does not claim a specific compositional range other than that of the binder and of cobalt, the claimed cerment and that of GB '654 and EP '125 are not patentably distinct.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIMA M. MCGUTHRY-BANKS whose telephone number is (571)272-2744. The examiner can normally be reached on M-F 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Roy King/
Supervisory Patent Examiner, Art Unit
1793

/T. M. M./
Examiner, Art Unit 1793
15 May 2008